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ABSTRACT

This book addresses the importance of the California Reading Initiative (CRI) to children who are struggling readers or who have reading disabilities. It notes the CRI focuses on disseminating information from research results and fostering teaching practices drawn from this research. This book emphasizes aspects of reading instruction for children who have difficulty learning to read, and it dispels common misconceptions about reading disabilities and reading instruction. Chapters include: (1) Effective Reading Instruction; (2) Early Intervention and Prevention: "Catch Them Before They Fall"; (3) Assessment That Drives Instruction: The Better We Use Assessment Data, the Better We Teach; (4) Access to the Core Curriculum and Reading Instruction; and (5) Practices Linked to Research. (Contains 52 references.) (EF)

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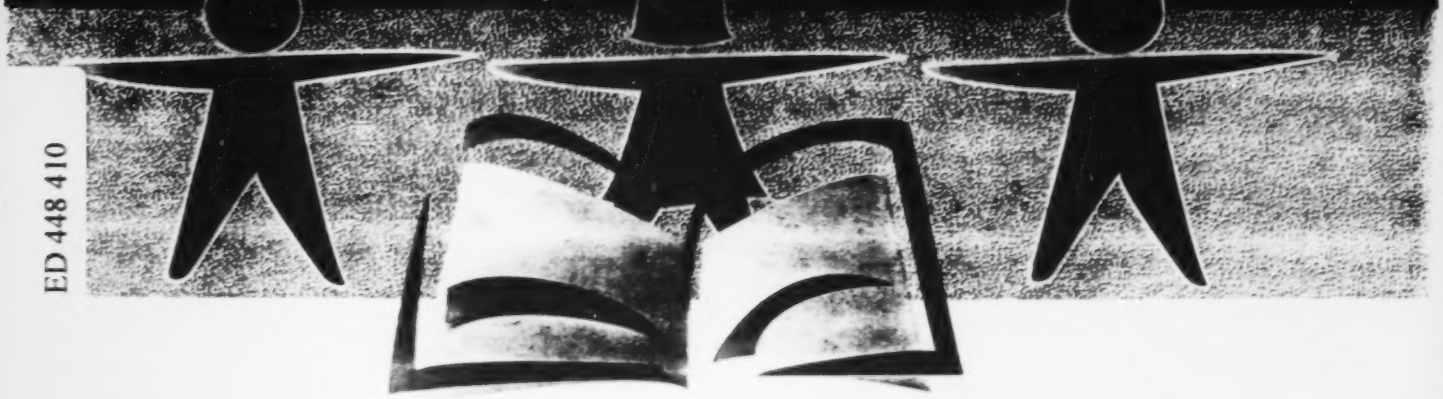

The California Reading Initiative and Special Education in California

CRITICAL IDEAS FOCUSING ON MEANINGFUL REFORM

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CALIFORNIA SPECIAL EDUCATION READING TASK FORCE
California Department of Education
California State Board of Education

Sacramento, 1999

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Foreword

TEACHING CHILDREN TO READ is a fundamental responsibility of all educators. Research has shown that for many children, learning to read is a struggle. Although the numbers are debated, it is well established that 30 to 40 percent of children will have significant difficulty learning to read. In today's society, the failure to read proficiently has profound educational and life consequences—it is the most likely reason that children drop out of school, are retained, or are referred to special education. Poor reading skills also greatly limit postsecondary school and work options. The importance of teaching children to read cannot be understated.

The California Reading Initiative is intended for all students.

In a bold move to address this urgent need, policymakers launched the California Reading Initiative (CRI). The initiative is an ongoing, multiyear, comprehensive effort to improve the reading achievement and literacy levels of California students. It is a collaborative effort of the Governor, Legislature, State Board of Education, Commission on Teacher Credentialing, and State Superintendent of Public Instruction. It includes major changes in policy and funding related to teacher preparation and professional development, assessment, class size, school libraries, and textbook adoption. The CRI is research-based and includes all learners.

The *California Reading Initiative and Special Education in California: Critical Ideas Focusing on Meaningful Reform* addresses the importance of the CRI to children who are struggling readers or who have reading disabilities. It includes discussion about effective reading instruction, early reading intervention and prevention, assessment, access to the core curriculum, and practices linked to research. It also dispels common misconceptions about reading disabilities and reading instruction.

Important components of the CRI are the *English-Language Arts Content Standards for California Public Schools, Kindergarten Through Grade Twelve* (1998) and the *Reading/Language Arts Framework for California Public Schools, Kindergarten Through Grade*

Twelve (1999). These two documents describe the content and skill requirements in reading, writing, listening, and speaking that all students need to master at each grade level. The English-language arts content standards are attainable by virtually all students given sufficient time and appropriate instruction and materials. The *Reading/Language Arts Framework* provides the road map for students to attain proficiency in the content standards. It is the professional responsibility of general and special educators alike to ensure that all students master the reading and language arts skills identified in the content standards.

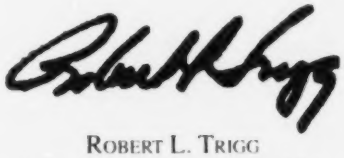
Because learning to read is the gateway to achieving future success, students with disabilities must receive the same high-quality, research-based instruction and instructional materials as their peers in general education. Forming new and stronger linkages between general and special education helps to ensure that all students learn to read proficiently.

Students who do not master necessary reading skills in the early grades must have adequate instructional time in reading, no matter what grade they are in.

All schools, elementary through high school, need to examine the structure of their school day to ensure that students who are struggling readers have sufficient time allotted each day for reading instruction. The *Reading/Language Arts Framework* recommends a minimum of two and one-half hours of instructional time daily for reading/language arts in the primary grades, a minimum of two and one-half hours in grades four through eight, and a minimum of one course per semester of English-language arts instruction in grades nine through twelve. However, to make substantial progress in reading, students with reading difficulties may need at least three or more hours daily of well-designed instruction regardless of grade level.

The *California Reading Initiative and Special Education in California* is intended for use by superintendents, administrators, principals, teachers, and parents in both general and special education. All teachers and specialists are encouraged to incorporate critical CRI information into teaching practices, classroom organization, and selection of instructional materials. School leaders and parents are urged to support this important work by creating successful learning environments and providing appropriate, necessary reading and instructional materials and ample time for reading each day. Together we can meet the challenge to ensure that all students in California become proficient readers.

DELAINE EASTIN
State Superintendent of Public Instruction



ROBERT L. TRIGG
President, California State Board of Education

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Introduction

READING PROFICIENCY IS AN IMPORTANT GOAL for virtually all students who receive special education services. It is basic to ongoing school success and essential for successful participation in society. Because educators need to provide the best possible instruction for students, expert reading instruction must be our priority.

In 1996 the California Reading Initiative (CRI) began a major restructuring of the way in which reading is taught in K–12 schools. The emphasis of CRI is unique. The initiative is the most focused statewide attempt to disseminate information about and foster teaching practices drawn directly from the results of respected scientific research in education, psychology, medicine, linguistics, and related fields. The reading initiative has made positive contributions to (1) teacher preparation programs and credential requirements; (2) staff development; (3) the California English–language arts standards adopted by the State Board of Education in 1997; and (4) the development of the 1999 *Reading/Language Arts Framework for California Public Schools*. Recently, the Governor and the Legislature continued the commitment to research-based reading instruction and staff development with the passage of Assembly Bill X1 2 (Chapter 2, Statutes of 1999), which established the Elementary School Intensive Reading Program and the Governor's Reading Award Program.

The California Reading Initiative applies to students whether or not they have special needs (e.g., students with a reading disability, dyslexia, or a learning disability or students who are gifted, English learners, low achieving, or receiving services under Title I of Improving America's Schools Act). The research base guiding the direction of the initiative includes all learners.

Effective prevention and early intervention programs can increase the reading skills of 85 percent to 90 percent of poor readers to average levels.

The impact of CRI is professionally promising for special education teachers and specialists, including school psychologists and speech and language specialists. A clear understanding of CRI is also critical for those in leadership positions at both school and district levels who are responsible for designing and supervising special or general education programs. It has been estimated that over 80 percent of all referrals to special education involve reading difficulties (Kavale and Reese 1992). However, effective prevention and early intervention programs can increase the reading skills of 85 percent to 90 percent of poor readers to average levels (Lyon 1997).

The task force invites all teachers and specialists to incorporate this critical CRI information into teaching practices, classroom organization, selection of instructional materials, suggestions for families, and assessment

techniques used to determine instructional objectives and monitor student progress.

This paper provides information on important issues related to the California Reading Initiative, its base of research, and its application to both general and special education. The five topics are as follows:

1. Effective Reading Instruction
2. Early Intervention and Prevention
3. Assessment That Drives Instruction
4. Access to the Core Curriculum and Reading Instruction
5. Practices Linked to Research

Additional Research on Learning Disabilities

Foorman, B. R.; D. J. Francis; S. E. Shaywitz; B. A. Shaywitz; and J. M. Fletcher. 1997. "The Case for Early Reading Intervention," in *Foundations of Reading Acquisition and Dyslexia: Implications for Intervention and Dyslexia.* Hillsdale, N.J.: Lawrence Erlbaum.

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1. Effective Reading Instruction

Since 1996, the California Reading Initiative has supported teacher in-service training in effective reading instruction and early prevention of reading difficulties. General education teachers have been well represented in the population of teachers receiving this training. However, special educators should receive the same training and support. It is critical for both general and special educators to know of research-validated instructional approaches and appropriate strategies for identifying students with reading disabilities.

Fortunately, research conducted during the last three decades shows that all students could be far more successful if provided well-designed, explicit, and systematic instruction. Critical reading skills requiring explicit instruction include:

- Linguistic pre-skills (phonemic awareness)
- Oral language skills (receptive vocabulary and syntax)
- Word analysis/decoding skills (sound-symbol relationships and blending ability)
- Reading fluency and automaticity of word recognition
- Reading comprehension strategies
- Prior knowledge for comprehension of text
- Spelling and orthography

What We Thought	What We Now Know
Misconception: Students with reading difficulties require qualitatively different reading instruction (e.g., reading styles, perceptual training, colored lenses).	***Validated Research:*** Struggling readers become far more successful when carefully taught the same fundamental reading skills that all successful readers must learn. Students with reading difficulties, however, require increased instructional time, more precisely sequenced teaching, and more precise and immediate feedback during learning (Fletcher and Lyon 1998; Simmons and Kame'enui 1998; Torgesen 1998).
Misconception: Dyslexia is usually a visually based learning problem causing students confusion in the way they see letters and words.	***Validated Research:*** The vast majority of students with severe reading difficulty have substantial weakness in auditory-related skills, such as identifying individual sounds with words (phonemic awareness) and associating those sounds with written letters (sound-symbol relationships) (Fletcher and Lyon 1998; Liberman et al. 1998; Lyon 1998; Shaywitz 1996; Torgesen 1998).

Researchers have clearly shown that explicit instruction in these areas effectively improves students' reading ability (Foorman, Fletcher, Francis, and Schatschneider 1998).

Previously, special education teachers may have used ineffective practices, including teaching according to learning modalities (auditory approaches in contrast to visual approaches), visual-perceptual training, remediation of deficits in psycho-linguistic skills, and use of literature-based textbooks for beginning decoding instruction and intervention. Such approaches have been found ineffective for instructing students.

Appropriate materials are important in reading instruction. Teachers using research-based instructional practices know that the effects of good teaching are strengthened when supported by well-designed materials. Special educators need instructional tools that support effective instruction. They cannot be required to construct, invent, substantially modify, or "make do" with materials of inefficient design, inappropriate difficulty level, or inappropriate content or materials that incorporate goals or strategies incompatible with what is known about effective reading instruction. Unfortunately, a patchwork of district discards and other abandoned reading materials is all that is available in some special education programs. Districts must provide special educators and their students with core curriculum materials and other instructional materials required for appropriate instruction in special education.

Special educators need instructional tools that support effective instruction.

The following resources are recommended:

- The 1999 *Reading/Language Arts Framework for California Public Schools, Kindergarten Through Grade Twelve*, which specifies many factors necessary in the design of instructional materials to make "kid friendly" materials with the potential to accelerate student learning and increase student success. This framework will guide the 2002 selection and adoption of effective and efficient language arts instructional materials for California public schools.
- The 1999 "California Supplementary Language Arts Instructional Materials Adoption," which is a first attempt to identify materials that are both aligned with the *English–Language Arts Content Standards for California Public Schools, Kindergarten Through Grade Twelve* and systematic and explicit in their approach to teaching fundamental reading skills.

Important instructional practices are as follows:

Balanced Reading Instruction for All Students

This instructional practice refers to the relative emphasis of time and attention given to various elements of reading instruction. The proper balance for each learner is determined by individual assessment.

As defined in the *Reading/Language Arts Framework for California Public Schools* (1999):

> *Balance* does not mean that all skills and standards receive equal emphasis at a given point in time. Rather, it implies that the overall emphasis accorded to a skill or standard is determined by its priority or importance relative to students' language and literacy needs (p. 4).

Approach for Students with Substantial Reading Difficulties

A balanced approach for these students involves considerable time and effort dedicated to basic decoding while attention is also given to important meaning-based aspects of reading. For most students, however, intensive direct teaching of phonemic awareness, sound-symbol relationships, blending skills, and reading fluency is of primary importance.

Approach for Students with Reasonably Advanced Decoding Skills

The balance of time and attention should be on extensive narrative and expository reading practice and on developing language skills, thinking skills, background knowledge, and various strategies supporting good comprehension. Students should receive systematic and explicit instruction in comprehension strategies, such as identifying the main idea, summarizing, and drawing logical inferences. Additionally, students will benefit from explicit instruction in expository text conventions, narrative story grammar, study strategies, outlining techniques, and use of reference materials. To maintain an appropriate instructional balance, however, teachers of students with reading difficulty will need to continue to focus instructional time on improving reading fluency.

Systematic, Explicit Phonics Instruction

Phonics is the sound-symbol system that is taught to all beginning readers. Students in later grades who have not mastered this essential skill must have this opportunity.

Explicit means that children are told the sounds that individual letters or letter combinations make. Students are not required to infer or discover the sounds.

Systematic refers to a carefully planned order of skill development. After learning just a few letter-sound correspondences, students are taught how to blend those sounds into words. Students are taught to use this blending strategy to identify unfamiliar words. As more sounds are introduced over many lessons, the number of words that can be read independently also increases. Students are not encouraged to use word identification strategies in which they only memorize words, guess from pictures or context, guess from the first letter of a word, or guess from the shape of a word.

Decodable text refers to reading material that uses the specific sounds that students have cumulatively learned during phonics lessons and avoids sounds and sight words not yet taught.

For students who are learning to read, decodable text provides practice in applying the skills and strategies they are learning. Often, trade books and other children's literature are the basis of beginning reading programs. However, even when carefully analyzed and selected for use, these materials cannot provide beginning readers with the efficient and necessary practice available through decodable text specifically designed for their instructional programs. Decodable text is a *critical* component of an effective program of systematic, explicit phonics.

Note: Many reading programs that incorporate phonics are not systematic or explicit in their design. Most commercially produced programs provide reading materials that are mismatched to instruction (Stein et al. 1999). That often results in students practicing at a frustration level rather than at the intended independent or instructional level. (*Frustration* level means text read with 89 percent accuracy or less; *instructional* level means text read with 90 to 94 percent accuracy; *independent* level means text read with 95 to 100 percent accuracy.) Special educators need to select well-designed instructional programs and materials that properly support students with reading difficulties according to their diagnosed needs.

Decodable text is a critical component of an effective program of systematic, explicit phonics.

Direct Instruction

Within the California Reading Initiative, considerable attention is given to direct instruction, an instructional approach consistently identified in research as being highly effective.

Direct instruction is not merely a lecture or a presentation of information to students. It does not rely on discovery or self-guided learning. It is not just drill. Effective direct instruction uses extensive teacher modeling followed by monitored and guided student practice. It involves focused teacher-student interactions. Learning is a direct result of continuous student progress on tasks that gradually become increasingly complex and difficult. When students respond correctly, the teacher directly and immediately acknowledges their success. When errors occur, quick and

efficient reteaching directs the students toward success. As students become more proficient, the teacher provides more independent activities and skill application opportunities.

Effective direct instruction does not focus on rote learning. The primary goal of effective direct instruction is to teach important independent strategies. For example, CRI calls for direct and systematic teaching of phonics and blending. This approach teaches students strategies for reading new words independently. In comparison, teaching all words through rote learning is an inefficient approach producing poor results.

For comprehension, students construct meaning from text. The ability to develop or construct meaning depends on the students' language skills, prior knowledge, and reasoning strategies and on the characteristics of the text. Direct instruction can efficiently prime students with important facts and relationships needed to understand text selections. Strategies for text reading, as well as the critical thinking skills fundamental to higher order comprehension, can and should be directly taught and practiced.

The primary goal of effective direct instruction is to teach important independent strategies.

Additional Resources on Effective Reading Instruction

Guide to the California Reading Initiative 1996 through 1999: Definitions and Research Findings, Legislation and Funding Sources. 1999. Sacramento: California State Board of Education. Available from California Reading Initiative Center, Sacramento County Office of Education.

The California Reading Initiative: January Update. 1999. Sacramento: California Department of Education <*www.cde.ca.gov/cilbranch/eltdiv/rdg-init.htm*>.

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Stein, M.; B. Johnson; and L. Gutlohn. 1999. "Analyzing Beginning Reading Programs: The Relationship Between Decoding Instruction and Text," *Remedial and Special Education,* 20 (5), 275–287.

Other Web Resources:

LD Online Reading <*www.ldonline.org/ld-indepth/reading/reading.html*>

Learning to Read, Reading to Learn (NCITE) <*http://idea.uoregon.edu~ncite/programs/read.html*>

2. Early Intervention and Prevention

"Catch Them Before They Fall"

One exciting finding of recent research is that reading failure is largely preventable. Effective prevention and early intervention programs can increase the reading skills of 85 percent to 90 percent of poor readers to average levels. The bad news, however, is that most students who do not learn to read during the primary grades may endure a lifelong struggle with reading (Foorman et al. 1998; Juel 1988; Stanovich 1993-94). By systematically applying the principles outlined in CRI, especially those described in the 1999 *Reading/Language Arts Framework*, schools are better able to ensure that almost all students become proficient and confident readers.

What We Thought	What We Now Know
Misconception: Reading instruction, including the direct instruction of early literacy skills, should be delayed until students are "developmentally ready."	***Validated Research:*** Delayed instruction fosters increased failure. Effective early intervention and prevention includes the direct teaching of critical literacy skills, such as phonemic awareness, letter recognition, oral language, and vocabulary development. These skills should be taught as early as preschool (Foorman et al. 1997; Good et al. 1998).
Misconception: Most children with reading difficulties will never learn to read well no matter what we do.	***Validated Research:*** The vast majority of students with reading difficulties can learn to read when given intensive instruction using research-validated practices (Foorman et al. 1998; Lyon 1997, 1998).

Through appropriate early intervention, the numbers of students viewed as having learning disabilities may be *substantially reduced*. For students with significant neurological or other disabilities affecting learning, the effect of those disabilities can also be reduced. Successful intervention is possible well before the destructive consequences of continued reading failure occur. Ensuring that all students have an opportunity to develop key language skills, such as phonological awareness, can prevent most from falling into the spiral of failure.

Whether a student learns to read often depends more on the instruction provided than on the label applied to the student. A lack of effective instruction can create situations in which students are misdiagnosed as having learning disabilities. Recent research (Snow et al. 1998) suggests that a significant number of children labeled *learning disabled* or *dyslexic* could have become successful readers had they received systematic and explicit instruction and intervention far earlier in their educational

careers. On average, 50 percent of reading difficulties appear to be preventable if students are provided effective language development in preschool and kindergarten and effective reading instruction in the primary grades (Slavin et al. 1993).

On average, 50 percent of reading difficulties appear to be preventable if students are provided effective language development in preschool and kindergarten and effective reading instruction in the primary grades.

Additional Resources on Early Identification and Intervention

Foorman, B. R.; D. J. Francis; S. E. Shaywitz; B. A. Shaywitz; and J. M. Fletcher. 1997. "The Case for Early Reading Intervention," in *Foundations of Reading Acquisition and Dyslexia: Implications for Intervention and Dyslexia.* Edited by B. Blachman. Hillsdale, N.J: Lawrence Erlbaum.

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Lyon, G. R. 1998. "Overview of Reading and Literacy Initiatives." Testimony provided to the Committee on Labor and Human Resources, U.S. Senate. Bethesda, Md.: NICHD.

Slavin, R.; N. Karweit; and B. Wasik. 1993. "Preventing Early School Failure: What Works?" *Educational Leadership*, 50 (4), 10–17.

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Stanovich, K. E. 1993-94. "Romance and Reality," *The Reading Teacher*, 47, 280–91.

Torgesen, J. K. 1998. "Catch Them Before They Fall," *American Educator*, 22 (1 and 2), 32–39.

3. Assessment That Drives Instruction

The Better We Use Assessment Data, the Better We Teach

ASSESSMENT IS THE FOUNDATION FOR determining what is the appropriate education for students. We rely on norm-referenced achievement test batteries to determine student eligibility, establish individualized education program (IEP) goals, and evaluate changes in standardized test scores over extended periods of time. However, as we learn more about the nature of effective reading instruction, we should correspondingly reexamine our assessment practices. Standardized assessments can provide information about whether a student qualifies for special education. But we also need assessment procedures that provide more detailed diagnostic information—information used to precisely select instructional goals and objectives and to monitor a student's continuous progress to ensure optimal achievement gains.

What We Thought	What We Now Know
Misconception: Norm-referenced tests provide adequate guidance for instructional planning and progress monitoring.	***Validated Research:*** Curriculum-based measurement provides more precise guidance for instructional decision making and progress monitoring (Shinn 1998).

Learning is accelerated when instruction is at an *appropriate level of difficulty*. Using informal assessment practices, the teacher can accurately determine a student's independent, instructional, and frustration reading levels. Although many other factors need to be considered, information about the student's instructional level helps the teacher determine whether district-adopted, grade-level reading materials are appropriate and whether alternative materials should be utilized.

Proper attention to reading component skills is necessary. It is important to assess a variety of specific skill areas: linguistic pre-skills (phonemic awareness), oral language skills (receptive vocabulary and syntax), word analysis/decoding skills (sound-symbol relationships and blending ability), reading fluency and automaticity of word recognition, reading comprehension strategies, prior knowledge required to comprehend text, and spelling and orthography. These assessment findings can provide guidance for educators in developing IEP goals and objectives and in choosing effective instructional materials and programs.

Proper attention to reading fluency is also important. Reading fluency is defined as the number of words read correctly per minute. Fundamental to skilled reading, fluency is highly correlated with reading comprehension (Shinn and Baker 1996). As a result, oral reading fluency is a strong indicator of overall reading "health." When students read fluently, they can use their language skills, reasoning skills, and background knowledge to compre-

hend text. In contrast, for students who have inadequate reading fluency, the "struggle" with text diminishes their ability to comprehend. Fortunately, fluency can be taught and is easily assessed through curriculum-based measurement.

Curriculum-based measurement (CBM) is an assessment procedure with four important characteristics: it (1) is simple; (2) is brief; (3) can be repeated frequently; and (4) generally utilizes the student's own instructional materials. The procedure is commonly used to establish and measure IEP objectives. For example, an IEP objective might state: *Student will read third grade passages at 100 correct words per minute with no more than three errors.* Each week, using CBM, the teacher directly and objectively measures the student's reading fluency during a one-minute timed oral reading by the student in the student's instructional materials. The number of words read correctly, as well as the number of errors, is recorded and charted. After several weeks the student's progress toward the objective becomes apparent. If the trend of progress toward the objective is inadequate, CBM becomes an early warning system. It alerts the teacher to the need to make appropriate midcourse instructional changes. With this opportunity there is a greater chance of student success during the course of the IEP.

Fundamental to skilled reading, fluency is highly correlated with reading comprehension.

Additional Resources on Assessment

Deno, S. L. 1995. "The School Psychologist as a Problem Solver," in *Best Practices in School Psychology.* Edited by J. Grimes and A. Thomas. Silver Springs, Md.: National Association of School Psychologists.

Fradd, S. H., and P. L. McGee. 1997. *Instructional Assessment: An Integrative Approach to Evaluating Student Performance.* Reading, Mass.: Addison-Wesley.

Hasbrouck, J., and G. Tindal. 1992. "Curriculum-Based Oral Reading Fluency Norms for Students in Grades 2 Through 5," *Teaching Exceptional Children,* 25 (3), 41–44.

Jones, E. D.; W. T. Southern; and F. J. Brigham. 1998. "Curriculum-Based Assessment: Testing What Is Taught and Teaching What Is Tested," *Intervention in School and Clinic,* 33 (4) 239–49.

Shinn, M. R. 1998. *Advanced Applications of Curriculum-Based Measurement.* N.Y.: Guilford Press.

Shinn, M. R., and S. Baker. 1996. "The Use of Curriculum-Based Measurement with Diverse Learners," in *Handbook of Multicultural Assessment: Clinical, Psychological, and Educational Applications.* Edited by L. A. Suzuki; P. J. Meller; and J. G. Pontero. San Francisco: Jossey-Bass, pp. 179–222.

Other Web Resources:

Reading and Literature Project "Results Project" <*www.crlp.ucsd.edu/*>

4. Access to the Core Curriculum and Reading Instruction

One of the primary missions of education is to develop capable readers. Without reading proficiency, students are continually excluded from full participation and opportunity to achieve academic success in school.

In the primary grades there is a strong emphasis on the reading/language arts core curriculum. As students progress upward through the grade levels, the instructional balance of time shifts away from reading/language arts to an emphasis on other subject areas. Beyond the primary grades the assumption is that students have already developed a foundation of reading skills.

This assumption cannot be made about students with reading difficulties. For struggling readers, it is essential that sufficient time to master critical reading skills continue to be provided as they progress through the grades. Students must reach necessary levels of fluency, automaticity, and comprehension.

There is widespread confusion over what *core curriculum* means. Core curriculum refers to the standards in subjects such as science and history–social science as well as in basic skills areas, such as reading and mathematics. However, the term *core curriculum* is often incorrectly used to refer to the grade-level materials and instructional methodology typically used in general education settings. Unfortunately, this misinterpretation of core curriculum may prove detrimental for students with serious reading difficulties. For these students the general classroom reading material is almost always too difficult and, therefore, is an ineffective vehicle for either reading or subject-area instruction.

Again, a necessary balance is required. When teaching students with serious reading difficulty, instructors have a clear responsibility to ensure reasonable, balanced, and efficient instruction in subject-area core curriculum objectives while dedicating adequate time to

What We Thought	What We Now Know
Misconception: Remediation of serious reading difficulties can occur within the context of whole-group instruction using grade-level materials.	***Validated Research:*** Successful reading remediation requires keen attention to specific, fundamental reading skills and instruction at a proper level of difficulty. Instructional conditions necessary for significant reading improvement include (1) properly identifying skills that students need to learn; (2) providing instruction and materials that specifically address students' deficiencies; and (3) scheduling adequate time for instruction and practice (Kame'enui and Simmons 1998; Orton Dyslexia Society 1997; Torgesen 1998; Vaughn 1998).

basic reading instruction. For many of these students, that will mean a significant increase of instructional time allocated to reading. The 1999 *Reading/Language Arts Framework* requires a minimum allocation of two and one-half hours of instructional time daily for reading/language arts in the primary grades, a minimum of two and one-half hours in grades four through eight, and a minimum of one course per semester of English-language arts instruction in grades nine through twelve. However, to make substantial progress, a student with reading difficulties may need a minimum of three or more hours daily of well-designed instruction regardless of his or her grade level.

To make substantial progress, a student with reading difficulties may need a minimum of three or more hours daily of well-designed instruction regardless of his or her grade level.

In the design of effective reading instruction for students with substantial difficulty, the location where a student is taught is not the primary concern. The primary concerns are to (1) properly identify critical skills that students will need to learn; (2) provide instruction and materials that will effectively address students' deficiencies; and (3) schedule adequate time for instruction and practice. With increased awareness of these three concerns, schools are developing effective schoolwide options for struggling readers regardless of their labels.

To better serve all students, schools should carefully examine their use of instructional time during the school day as well as explore before-school, after-school, and summer-school options. Schools can tailor instruction to individual students' learning needs by reexamining schoolwide language arts programs. By grouping students according to similar instructional needs, schools can provide extended periods of rigorous reading instruction for students with substantial reading difficulties. For example, a simple solution is to provide small-group reading instruction for these students during the time that more proficient students are engaged in sustained silent reading and other independent activities. Using well-designed instructional groupings enhances the efficiency of instruction for all students. Groups may be organized in a variety of ways—in class, among grade-level classes, and across classes of different grade levels.

Redesigning a language-arts program may present a scheduling challenge, especially at the secondary level. Creative options for basic language arts classes and electives should be developed in response to the needs of the many students with significant reading difficulties. Schools should examine available resources at all grade levels and determine how staff members can work together efficiently to provide a learning safety net. Under the provisions of School-Based Program Coordination and Schoolwide Programs, creative relationships are encouraged among students in special education, Title 1 of Improving America's Schools Act, State Compensatory Education, general education, and other programs.

Although scheduling adequate time can certainly be a challenge, the importance of reading proficiency must not be underestimated; it is the key to efficient learning in subject areas such as science, health, and social studies.

Until students are proficient in reading, modifications to subject-area classroom instruction can help them learn core curriculum information and concepts. Through hands-on activities, projects, and nonprint media, some of the effects of reading difficulties can be bypassed, allowing students to achieve subject-area goals. Many of the tools necessary to successfully teach subject-area information to students with severe reading difficulties are available.

However, good instructional design and classroom modifications can never be considered substitutes for effective reading instruction. A primary mission is to teach students to read. Without proficient reading skills, students' access to subject content areas and prospects for academic and life success are greatly limited.

Broken Promises: Reading Instruction in the Resource Room

In their study of instructional practices, Vaughn et al. (1998) report that the majority of the resource teachers attempted to remediate significant reading disabilities by using the district-mandated core literature program. The study revealed that the teachers had been directed by their districts to use the core curriculum materials, use whole language, and otherwise imitate the general education classroom. It found practices identified in research that effectively accelerate students' reading progress were largely absent. These educators were unable to place students at correct instructional levels, select appropriate instructional materials, or use effective teaching strategies. The students were provided an inefficient "one size fits all" model. The study documented little or no student progress. When teaching students with disabilities, educators must ensure that instruction reflects appropriate goals, appropriate difficulty levels, and effective instructional strategies; that is, the strategies described in the 1999 *Reading/Language Arts Framework for California Public Schools, Kindergarten Through Grade Twelve.*

Reading/Language Arts Framework for California Public Schools

An important concept contained in the framework is the need to provide universal access to curriculum and instruction for all learners. For students with diverse learning needs, universal access means providing adequate and appropriate instruction that will enable them to successfully learn content standards. The framework provides guidance in selecting appropriate content standards for special needs students, implementing effective educational strategies, and selecting and designing effective teaching materials and practices for language arts instruction.

Additional Resources on Access to the Core Curriculum and Reading Instruction

Informed Instruction for Reading Success: Foundations for Teacher Preparation. 1997. Baltimore, Md.: Orton Dyslexia Society.

Kame'enui, E. J. 1995. "Diverse Learners and the Tyranny of Time: Don't Fix Blame, Fix the Leaky Roof." *The Reading Teacher,* 46 (5).

Kame'enui, E. J., and D. C. Simmons. 1990. *Designing Instructional Strategies: The Prevention of Academic Learning Problems.* Columbus, Ohio: Merrill Publishing Co.

Snider, V. E. 1997. "Transfer of Decoding Skills to a Literature Basal," *Learning Disabilities Research and Practice,* 12 (1), 54–62.

Summary Report on Prevention of Reading Difficulties in Young Children. 1998. Prepared by Toni Bickhart, Senior Associate Teaching Strategies, Inc., for the U.S. Department of Education Reading Summit, Washington, D.C., September 18–19.

Vaughn, S.; S. W. Moody; and J. S. Schumm. 1998. "Broken Promises: Reading Instruction in the Resource Room," *Exceptional Children,* 64 (2), 211–225.

For students with diverse learning needs, universal access means providing adequate and appropriate instruction that will enable them to successfully learn content standards.

5. Practices Linked to Research

EDUCATORS ARE SOMETIMES WARY OF RESEARCH because they have been pushed and pulled by the swinging pendulum of contradictory claims. It is common to hear educators say, "Research can prove anything you want it to prove." The statement is true only if opinion and simple observations are allowed to masquerade as research. Fortunately, a body of reliable research that complies with professional standards of scientific method exists. This body of research can help us select effective educational practices and avoid the previous pendulum swing of unproductive trends.

What We Thought	What We Now Know
Misconception: Research can prove anything you want it to prove; therefore, it is of little practical value.	***Validated Research:*** Research that adheres to accepted rules of scientific inquiry provides valuable guidance. The research–practice chasm can be bridged (Carnine and Meeder 1997; Ellis and Fouts 1997; Grossen 1996).

Most unproductive trends of the past began as promising instructional innovations. However, rigorous scientific study of those innovations did not occur until massive numbers of students had received instruction through the then-new but ineffective methods. At best, many fads robbed students of precious instruction time. At worst, learner-unfriendly approaches furthered the frustration of students already experiencing profound reading difficulties.

In contrast, instructional methods validated by reliable scientific evidence provide promise for all students, including those with reading difficulties. Therefore, the selection of research-validated instructional methods is a professional responsibility clearly articulated in the California Reading Initiative.

Research forming the foundation of CRI includes numerous studies conducted by the National Institute of Child Health and Human Development (NICHD). These and other supportive studies possess the characteristics of reliable research commonly demanded by the scientific community.

Some characteristics of reliable educational research are as follows:

- Uses controlled scientific method
- Is reviewed by peers within the scientific community
- Produces results that can be replicated
- Produces results consistent with previously verified educational research
- Produces results consistent with findings of research conducted in related fields (e.g., medicine, psychology, and linguistics)

In their recent work Ellis and Fouts (1997) review the research base for many popular educational approaches. Surprisingly, there are

An Example from the Past: Is Modality-Based Reading Instruction Effective?

In their study, Arter and Jenkins analyzed the scientific studies examining the effects of modality-based instruction. In their analysis, they found very sparse evidence supporting its effectiveness and a significant body of evidence indicating ineffectiveness.

In contrast, however, they also found that a majority of special education teachers believed modality-based reading instruction was effective and that its effectiveness was supported by scientific evidence.

approaches that have no reliable experimental research demonstrating their effectiveness with students in California schools. Today, it is still common to find teacher trainers actively supporting the use of modality-based instruction and other nonvalidated theories and practices.

Fortunately, a growing number of schools are using research-validated practices, and they are demonstrating improved results for students. Because of what we now know about reading instruction, the direction of the California Reading Initiative represents a break from the tradition of the "swinging pendulum."

Additional Resources on Education and Research

Arter, J. A., and J. R. Jenkins. 1977. "Examining the Benefit and Prevalence of Modality Considerations in Special Education." *Journal of Special Education,* 11 (3), 281–98.

Carnine, D., and H. Meeder. 1997. "Reading Research into Practice." *Education Week* (September 3), 41, 43.

Carnine, D. 1999. "Campaigns for Moving Research into Practice," *Remedial and Special Education,* 20 (1), 2–6.

Ellis, A. K., and J. T. Fouts. 1997. *Research on Education Innovations* (Second edition). Larchmont, N.Y.: Eye on Education.

Grossen, B. 1996. "Making Research Serve the Profession," *American Educator,* 20 (3), 7–8, 22–27.

Lloyd, J. W.; S. R. Forness; and K. A. Kavale. 1998. "Some Methods Are Better Than Others," *Intervention in School and Clinic,* 33 (4), 195–200.

Snider, V. E. 1992. "Learning Styles and Learning to Read: A Critique," *Remedial and Special Education,* 13 (1), 6–18.

Other Web Resources

National Center to Improve the Tools of Educators (NCITE)
<http://idea.uoregon.edu/~ncite/documents.html>

Resources for Parents

Tips for Parents: How to Help Your Child Become a Reader. 1997. Sacramento: California State Board of Education.

For Parents: Key Components of Early Reading Instruction: LD Online–Reading:
<http://www.ldonline.org/ld_indepth/reading/reading.html>

Tips for Parents About How to Strengthen Reading Skills: Learning to Read, Reading to Learn: National Center to Improve the Tools of Educators (NCITE)
<http://idea.uoregon.edu/~ncite/programs/read.html>

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